

GOVERNMENT OF THE DISTRICT OF COLUMBIA
District Department of the Environment



October 11, 2013

The Honorable Phil Mendelson
Chairman
Council of the District of Columbia
1350 Pennsylvania Avenue NW, Suite 402
Washington, DC 20004

RE: Clean and Affordable Energy Act of 2008, D.C. Law 17-250

Dear Chairman Mendelson:

Pursuant to Section 201 of the Clean and Affordable Energy Act of 2008, D.C. Law 17-250, the District Department of the Environment ("DDOE") is pleased to submit the Third Quarterly Report for Fiscal Year 2013 on behalf of the District of Columbia Sustainable Energy Utility ("DC SEU"). This report details the activities undertaken and the accomplishments of the energy efficiency and renewable energy programs administered during April 1, 2013 – June 30, 2013. The report was prepared by the DC SEU. DDOE, the designated contract administrator, is transmitting the attached report.

Please feel free to contact me or Dr. Taresa Lawrence at 202-671-3313 if you have any questions regarding this report.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith A. Anderson", is written over the word "Sincerely,".

Keith A. Anderson, Director
District Department of Environment

Attachments

cc: Councilmember Mary Cheh, Chairperson, Committee on the Environment, Public Works, and Transportation
DC Councilmembers
Nyasha Smith, Secretary of the Council





DISTRICT OF COLUMBIA SUSTAINABLE ENERGY UTILITY

Third Quarter Report for Fiscal Year 2013

April 1- June 30, 2013

July 31, 2013

Table of Contents

MESSAGE FROM THE MANAGING DIRECTOR	1
QUARTERLY FEATURE.....	2
1. At a Glance: Progress against Benchmarks	5
2. Core Area Performance	5
3. Initiative Activity.....	6
4. Third Quarter FY 2013 Highlights	9
5. Sector Highlights in the Core Areas	9
Residential Services	9
Low-Income Multifamily	11
Renewable Energy	12
Commercial and Institutional	13
6. Activity Supporting DC SEU Programming	15

MESSAGE FROM THE MANAGING DIRECTOR

In a time when the economy seems to be the talk of the day, every day, one often wonders what we can do to promote economic growth. One of the most obvious answers is this: The growth and development of any city or organization requires the growth and development of its people. At the DC SEU, we are committed to three features of a healthy society: sustainable energy, community engagement, and economic development. With these commitments in mind, a key path to that healthy society is the development of human talent.



This summer, the DC SEU has welcomed eight new interns. All District residents, they have come from several different origins, schools, and disciplines. These 2013 summer interns bring even more diversity and new perspectives to the DC SEU workplace. Their individual and collective intellectual curiosity provides us with fresh insights and ideas. Through the summer intern program, they are learning about energy supply and consumption in the District, best practices for energy efficiency, efficient products and appliances, and renewable energy technology.

The holistic cultivation of our interns is of special importance to us. Each has been given the opportunity to participate in office-wide and departmental meetings, and each has been invited to participate in site visits and community events. Interns are encouraged to seek out projects of interest to them, in addition to those assigned to them. Currently our interns are both learning and assisting in budget forecasting, developing radio public service announcements, improving IT services, and analyzing customer energy consumption.

Workforce development is essential to creating a thriving economy in the District. In an effort to uphold our commitment to helping develop the District's economy and to developing the human talent we know exists here, we are pleased that we have what we consider the finest interns residing in the District.

Outside office hours, our interns have joined the DC SEU community on cookouts, baseball games at the Washington Nationals Stadium, and even a city scavenger hunt. On Fridays, the interns participate in team-building activities and are scheduled to visit historic and educational sites around the District.

We appreciate all that the 2013 summer interns have contributed thus far. As they continue on, we hope that the knowledge, skills, and expertise they acquire here will help them become trailblazers in the District's green economy!

Ted Trabae

Managing Director

QUARTERLY FEATURE

DC SEU Serves up Energy Savings at Union Kitchen

The last time you waited in line at a food truck, you might have wondered how the vendor can prepare so many meals in a kitchen the length and width of a truck. Many food trucks, small catering companies, and farmer's market vendors need workspace in a professional kitchen to prepare their products. Union Kitchen, a food incubator business and industrial kitchen located in a warehouse just behind Union Station, provides a collaborative prep space for 35 such food entrepreneurs.

This summer, Union Kitchen contacted the DC SEU to learn how they could make their operations more energy efficient. The 14 ovens, 4 industrial refrigerator and freezer units, lighting, and HVAC units run for long hours at all times of the day. Their energy costs? High. Through a site visit and walk-through, the DC SEU found plenty of opportunity for energy improvements.



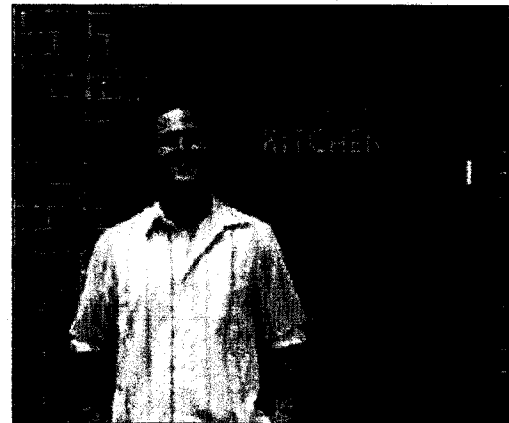
"The ovens hold temperature better, are more consistent, more reliable," said Mr. Singer. "People are more satisfied with them."

positive experience, Union Kitchen referred a locally owned market to the DC SEU. The market now has upgrade projects under way.

Union Kitchen co-owners Jonas Singer and Cullen Gilchrest went into business to support local entrepreneurs.

"We involve the community in our business, because the community is our business," said Mr. Gilchrest.

Working with the DC SEU and encouraging other businesses to save energy is a great example of connecting local business with community resources to the benefit of all.



Jonas Singer, co-owner of Union Kitchen, said the DC SEU energy upgrades are helping them "save a lot of money and electricity."

The DC SEU created an energy management plan for the space, based on the customer's goals and on findings from the site visit. The short-term approach: upgrade lighting, energy controls, and appliances. In the long term, Union Kitchen can consider operational improvements such as a garage door curtain, central HVAC, and range hood upgrades. In July, Union Kitchen received \$1,550 from the DC SEU Business Energy Rebate program for energy-efficient gas and electric kitchen equipment that will reduce their annual energy use by 500 therms and 6,470 kWh of electricity.

The new equipment will reduce the energy use of their operations and help keep costs down for their members. As a result of their



DISTRICT OF COLUMBIA SUSTAINABLE ENERGY UTILITY

This report of the District of Columbia Sustainable Energy Utility covers the period from April 1, 2013, through June 30, 2013. This progress report contains information about the DC SEU's activity to date in FY 2013 in the four core service areas: Residential, Low-Income Multifamily (LIMF), Renewables, and Commercial and Institutional (C&I).

The use of the term *DC SEU* throughout this report indicates an integrated collaboration among the members of the Sustainable Energy Partnership, under the leadership of the DC SEU Contractor, the Vermont Energy Investment Corporation: Groundswell, Institute for Market Transformation, L.S. Caldwell & Associates, PEER Consultants, PES Group, Skyline Innovations, and Taurus Development Group.

1. At a Glance: Progress against Benchmarks

Table 1. Performance to date, measured against benchmarks and contract requirements¹

Category	Item	Description	Metric Unit	Benchmark Minimum	Period Results	Year-to-Date	Benchmark Progress
Performance Benchmarks	1a	Reduce per-capita consumption - Electricity	MWh	103,700	3,184	27,725	27%
	1b	Reduce per-capita consumption - Natural gas	Mcf	272,000	4,039	12,484	5%
	2	Increase renewable energy generating capacity	Cost / kWh				
	3	Reduce growth in peak demand	kW	2,000	596	4,203	210%
	4	Improve energy efficiency in low-income housing	% of annual budget	\$ 4,620,000	\$ 145,152	\$ 2,799,866	61%
Minimum Requirements	5	Reduce growth in energy demand of largest users					
	6	Increase number of green collar jobs ¹	Green job hours directly worked by DC residents, earning at least a Living Wage	128,128	5,954	66,481	52%
	7	Expenditure of annual SETF dollars allocated to DC SEU services	Fiscal year dollars	\$ 15,400,000	\$ 692,762	\$ 10,694,541	69%
	8	Expenditures with Certified Business Enterprises	50% of expenditures on Implementation Contractors	\$ 2,400,000	\$ 5,134	\$ 2,753,270	115%
	9a	Annual expenditures related to electric energy efficiency	Program expenditures that reduce electrical energy consumption, allocated to sustainable energy activity	\$ 9,240,000	\$ 319,805	\$ 9,199,009	100%
	9b	Annual expenditures related to natural gas energy efficiency	Program expenditures that reduce natural gas consumption, allocated to sustainable energy activity	\$ 2,310,000	\$ 372,957	\$ 1,470,117	64%

¹ The DC SEU provides services under a performance-based contract that contains a broad array of performance benchmarks and other contract requirements. These benchmarks are derived from goals established in the District's Clean and Affordable Energy Act of 2008. The DC SEU contract contains additional minimum contract requirements, beyond the contract performance goals.

Energy savings values in **Table 1** represent the first year's savings at the customer meter, with generally accepted utility adjustment values for: (1) free-ridership (action by customers who make efficiency improvements without program assistance); (2) spillover effects (action by customers who are influenced by the existence of the program to make efficiency improvements, but who are not program participants); and (3) energy losses (losses from electricity generation and distribution ["line losses"] and losses from natural gas generation and distribution).

Savings also include interactive effects across energy types. For example, an energy-efficient light bulb generates less heat than a standard, incandescent light bulb. Installing this energy-saving measure lowers the need for air conditioning in lighted spaces (that is, it lowers the summer cooling load), but it increases the winter heating load. Using the example of a customer who heats a space in the winter with natural gas and cools the space in summer with air conditioning: After installing energy-saving bulbs, that customer will experience an increase in gas use, but will also save electricity from the reductions in the lighting and cooling loads.

2. Core Area Performance

Table 2. Core area expenditures and energy savings, to date²

	Residential	Low-Income Multifamily	Commercial and Institutional	Renewable Energy	Total
DC SEU Expenditures					
Expenditures for this period	\$ 191,180	\$ 35,579	\$ 443,972	\$ 22,031	\$ 692,762
Expenditures for this quarter	\$ 658,345	\$ 188,981	\$ 1,136,907	\$ 250,637	\$ 2,234,870
Year-to-date expenditures	\$ 1,427,296	\$ 1,712,053	\$ 6,698,493	\$ 856,698	\$ 10,694,541
Annual budget estimates	\$ 2,871,000	\$ 3,143,000	\$ 6,629,000	\$ 1,156,000	\$ 15,400,000
Percent of the annual budget spent	50%	54%	101%	74%	69%
Annual Savings, MWh					
Electricity savings (MWh) for this period	1,599	0	1,585	0	3,184
Electricity savings (MWh) for quarter	5,728	0	1,982	0	7,710
Year-to-date savings (MWh)	11,542	2,008	14,067	108	27,725
Percent of annual MWh savings goal met	45%	37%	28%	12%	33%
Summer Peak Demand Savings, kW					
Summer peak demand reduction (kW) for this period	219	0	377	0	596
Summer peak demand reduction (kW) for quarter	804	0	440	0	1,244
Year-to-date summer peak demand reduction (kW)	1,665	284	2,234	20	4,203
Percent of summer peak demand reduction goal met	270%	217%	181%	95%	210%
Annual Savings, Mcf					
Natural gas savings (Mcf) for this period	-2,190	0	6,229	0	4,039
Natural gas savings (Mcf) for quarter	-7,506	0	24,923	0	17,417
Year-to-date savings (Mcf)	-14,345	355	25,997	477	12,484
Percent of annual Mcf savings goal met	-43%	2%	21%	1%	6%
Lifetime Economic Benefit					
Lifetime Economic Benefit for this period	\$ 713,457	0	\$ 5,662,428	0	\$ 6,375,885
Lifetime Economic Benefit for quarter	\$ 2,560,462	0	\$ 11,641,331	0	\$ 14,201,793
Year-to-date Lifetime Economic Benefit	\$ 5,213,546	\$ 3,382,191	\$ 30,499,484	\$ 798,901	\$ 39,894,122
Participants Served					
Participants served, for this period	4,065	0	19	0	4,084
Participants served, for quarter	15,088	0	39	0	15,127
Year-to-date participants served	31,446	2,529	141	135	34,251

¹ Summer peak demand savings represent the avoided electrical demand at the time of summer peak.

² Lifetime Economic Benefit is the present value of the avoided cost of energy over the life of installed efficiency measures.

² The DC SEU develops market-based initiatives to serve District customer groups. Savings goals for core service areas are measured in megawatt hours (MWh) for electricity consumption savings, kilowatts (kW) for reduced coincident demand (energy demand required by a given customer or class of customers during a particular time period, and thousand cubic feet (Mcf) for natural gas consumption savings.

3. Initiative Activity

Table 3. Initiative activity by sector³

Sector	Initiative	Period Results			Year-to-Date Results		
		Number of participants enrolled	Number of participants with installed measures	Annual customer cost savings	Number of participants enrolled	Number of participants with installed measures	Annual customer cost savings
Commercial and Institutional	Business Energy Rebates	43	2	\$ 1,983	56	31	\$ 236,309
	Commercial and Institutional Customer	8	10	\$ 259,883	83	49	\$ 1,355,562
	T-12 Market Transformation	1	4	3,561	4	4	\$ 3,561
	T-12 Replacement		3	\$ 6,715	1	56	\$ 486,263
					2,180	268	\$ 136,333
					197	2,261	\$ 111,490
Residential	Retail Efficient Products		1,890	\$ 74,722		25,831	\$ 1,010,345
	Efficient Products Food Bank		2,154	\$ 98,375		5,445	\$ 249,472
	Home Performance with ENERGY STAR	36	18	\$ 1,476	106	135	\$ 15,527
	Federal Home Loan Bank Home Performance		3	\$ 131	41	35	\$ 3,971
		8			9	1	\$ 6,485
						33	\$ 11,778

¹ The Retail Efficient Products and Efficient Products Food Bank initiatives measure energy savings from the sale and distribution of efficient products and do not have enrolled participants.

Table 4. Project pipeline, by sector and initiative

Sector	Initiative	FY 2013 Pipeline			
		Number of projects	Estimated electricity savings (MWh)	Estimated gas savings (Mcf)	Estimated financial incentive
Commercial and Institutional	Business Energy Rebates				
	Commercial and Institutional Customer	76	21,979	76,009	\$ 641,941
	T-12 Market Transformation	36	524		\$ 175,892
	T-12 Replacement Direct Install				
		5	2,268	162	\$ 317,437
		104	29	0	\$ 513,739
Residential	Retail Efficient Products				
	Efficient Products Food Bank				
	Home Performance with ENERGY STAR				
	Federal Home Loan Bank Home Performance				
Renewable Energy		5		1,760	\$ 397,000
	Solar Photovoltaic Systems				

¹ Electricity and natural gas savings for Business Energy Rebates are provided for completed rebate projects.

² The Implementation Contractor Direct Installation, T-12 Replacement, and Solar Photovoltaic Systems initiatives are not adding projects at this time.

³ The Retail Efficient Products and Efficient Products Food Bank initiatives measure energy savings from the sale and distribution of efficient products and do not have a pipeline of projects.

³ For a list of FY 2013 initiatives, please see Table 6. DC SEU initiatives, by sector.

Table 5. Quantity of measures installed year-to-date, by category and initiative

Energy Efficiency Measures	Business Energy Rebates	Commercial and Institutional Custom	T-12 Market Transformation	T-12 Replacement	Low-Income Comprehensive	Implementation Contractor Direct Installation	Low-Income Multifamily T-12 Replacement	Retail Efficient Products	Efficient Products Food Bank	Home Performance with ENERGY STAR	Federal Home Loan Bank Home Performance	Solar Hot Water	Solar Photovoltaic Systems	Total
Air Conditioning Efficiency	28	13			60									101
Cooking and Laundry	4				204			27						235
Hot Water Efficiency	690				173	5,422				350	35			6,670
Hot Water Replacement	1	1									1			3
Light Bulb/Lamp	2,219	3,322	11	1,113		12,415	679	154,737	49,007	1,124	555			225,182
Lighting Efficiency/Controls	223	1,912			22									2,157
Lighting Hardwired Fixture	983	8,033	138	14,504	1,194		2,734							27,586
Motor Controls	16	25												41
Office Equipment		174												174
Refrigeration	22				170			15						207
Renewables												1	33	34
Space Heat Efficiency		1			320					16	3			340
Space Heat Replacement	6	3									3			12
Thermal Shell					29					28	4			61
Ventilation					196									196
Total	4,192	13,484	149	15,617	2,368	17,837	3,413	154,779	49,007	1,518	601	1	33	262,999

4. Third Quarter FY 2013 Highlights

In just one year, the DC SEU has established a robust Efficient Products program that has grown from the debut CFL promotion to a comprehensive set of energy efficiency home energy solutions. District residents can now cut down on their energy costs with lighting, appliances, and natural gas efficient products offered at reduced prices. In the third quarter, the DC SEU distributed more than 50,000 CFLs in coordination with the nonprofit assistance organization, Bread for the City; partnered with 15 new retail locations, offered \$50 rebates off the price of ENERGY STAR® clothes washers and refrigerators, and prepared for the launch of the Gas Efficient Products promotion.

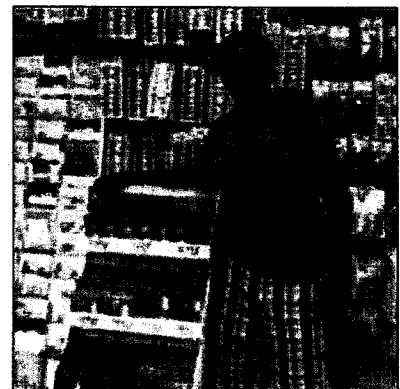
Working with participating retailers in all eight Wards, the DC SEU gathers customer and retailer feedback and sales data. Using this information, the DC SEU made significant improvements in the third quarter to Retail Efficient Products promotions. By providing retailers with an upfront incentive for the CFLs they carry in their stores, the DC SEU reduced the financial risk to small, independent retailers, thus enabling more locally owned stores to participate. In addition, the LED promotion is shifting from a mail-in rebate program to an on-the-shelf discount, making it easier for customers to purchase lighting upgrades. These changes will expand the availability of high-value energy-efficient products at affordable prices throughout the city.

In addition to developing local talent through summer internships, the DC SEU continues to build its workforce to offer more services locally to customers. In the third quarter, the DC SEU hired a Project Intake Coordinator, Human Relations Manager, and two Energy Consultants. These functions were previously filled by positions resident in both Vermont and the District. With these new additions, the DC SEU now has 39 staff members and interns, all whom are District residents.

5. Sector Highlights in the Core Areas

Residential Services

- **Home Performance with ENERGY STAR.** Participating Contractors completed 18 Home Performance with ENERGY STAR projects in the third quarter. All of these projects were funded through the Federal Home Loan Bank program for income-eligible homeowners. These projects represented \$216,000 of work for Implementation Contractors. Following a direct-mail marketing effort, there was a significant increase in activity for Home Performance with ENERGY STAR this quarter. Implementation Contractors completed



Dollar Plus in Ward 8 joined the DC SEU CFL promotion as a participating retailer in May

86 audits for new projects in the third quarter. See **Section 6, Finance and Leveraging**.

- **New retail locations.** Early in the third quarter, five Yes! Organic Markets and four other retailers in Ward 8 began participating in the DC SEU CFL promotion: King's Discount, Martin's Foodtown, Dollar Plus Food Store, and Corner Market. The DC SEU also welcomed two new national retail chains, Giant and Big Lots!, as participating retailers for the DC SEU CFL promotion in the third quarter. Reduced-price CFLs became available at Big Lots! locations on May 31 and at five Giant stores in the District on June 7. With the addition of these new participating retailers, 50 stores are now partnering with the DC SEU to sell reduced-price CFLs and LEDs. To date, 150,000 CFLs have been sold through the FY 2013 CFL promotion.
- **In-store LED markdown.** Following a low uptake on the ENERGY STAR mail-in rebates for LED products, the promotion will switch from a rebate to an on-the-shelf discount. On July 1, reduced-price LEDs will become available at Home Depot. On-the-shelf LED promotions are in progress with additional retailers.
- **Food Bank program.** The FY 2013 DC SEU Food Bank initiative launched in April, and by June, 50,000 CFLs were distributed to low-income District residents in the third quarter. This year, the DC SEU is providing CFL replacements for incandescent flood lights, 3-way, 60-watt, 75-watt, and 100-watt light bulbs. The DC SEU held lighting demonstrations at Bread for the City on June 3, 4, and 6.
- **Gas efficient products.** Research in gas utility programming in northeastern states and in gas efficient products was completed in May. From this research, the DC SEU prepared to launch efficient gas products promotions for residential boilers, water heaters, and furnaces on July 1. In June, the DC SEU reached out to gas trade allies and contractors to inform them about the gas appliance promotion. Rebates will offset at least 50% of the incremental cost of high-efficiency gas equipment.



- **CEE conference.** Two DC SEU staff members attended the Consortium for Energy Efficiency (CEE) Summer Program meeting, May 28-30. The CEE Summer Program had 200 attendees. The Efficient Products Manager participated in gas committee sessions and learned about other utilities' relationships with trade allies and how to overcome perceived barriers to program participation. The Home Performance Program Assistant attended sessions on home energy efficiency initiatives in other states.

- **EE Global conference.** The DC SEU attended EE Global, the 2013 Energy Efficiency Global Forum, on May 20 and 21 to learn about emerging industry standards, industry leaders in the energy efficiency market, and new technology. The conference had an estimated 300 attendees.
- **Sears retail event.** On June 22 the DC SEU held its first in-store appliance retail event at Sears in Tenleytown. DC SEU staff were onsite for the SEARS Annual Family and Friends sale to promote \$50 rebates on ENERGY STAR refrigerators and clothes washers.
- ***On the horizon.*** *In the fourth quarter, the DC SEU will complete five FY 2013 FHLB Home Performance projects. These projects account for the remaining FHLB funding for the FY 2013 fiscal year. Additional natural gas savings are expected from the gas efficient products promotion in the fourth quarter.*

Low-Income Multifamily

- **Technical assistance.** The DC SEU continued to coordinate energy upgrades for the District's first property-assessed clean energy (PACE) project.⁴ Rebates are available for the building's common area lighting, controls, and vendor energy economizers.
- **Engineering training.** DC SEU Energy Consultants attended technical training on multifamily project analysis on April 16 and 17 and June 1 and 2, to continue to build local expertise in this sector. Training sessions covered project review and planning, analysis of measures, methods for offering recommendations, and improving internal and external communications.
- **Training in emerging technologies.** In coordination with the Institute for Market Transformation and the DC Department of Consumer and Regulatory Affairs (DCRA), the DC SEU continued to plan technology training sessions for architects and engineers, as well as for DCRA inspectors. Attendees will learn about new and emerging technologies that can help buildings exceed the 2012 International Energy Conservation Code (IECC). The 2012 IECC is expected to be formally adopted by the District in September.⁵

⁴ PACE = property assessed clean energy, a financing mechanisms that allows ratepayers to make significant investments in energy improvements to their buildings, using a long-term, low-interest loan structure that is paid back as a line item on property taxes.

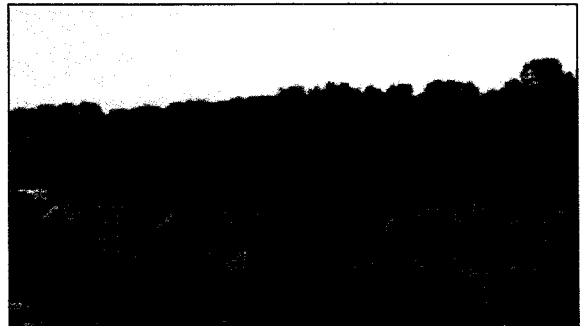
⁵ Introduced in 1998, the IECC standard addresses energy efficiency in terms of cost savings, reduced energy use, conservation of natural resources, and the impact of energy use on the environment. Important changes in this sixth edition (IECC 2012) include measures to improve the thermal envelope, HVAC systems and electrical systems of residential buildings up to three stories in height.

- Commercial enhancements include required energy savings for windows, doors and skylights; thermal envelope efficiency; and increased efficiencies for installed HVAC equipment.

- **Multifamily forum.** On May 31, the DC SEU multifamily Account Manager attended the Marcus & Millichap (real estate brokerage firm) Multifamily Forum to learn about Mid-Atlantic building developers' plans for the next five years. Emerging trends included reductions in common amenities for buildings (doormen and pools, for example) and increases in environmental consciousness for properties that reduce utility expenses and are less wasteful. The need for more multifamily housing in the District was also discussed, since demand is currently higher than supply for both the market rate and affordable housing segments. The forum had more than 325 attendees.
- **National Leased Housing Association.** In preparation for the National Leased Housing Association Green Committee Meeting on June 21, the DC SEU prepared talking points and provided updates on current initiatives for the Director of the Department of Housing and Community Development (DHCD). The Director spoke on behalf of District sustainability efforts in the multifamily sector. The DC SEU and DDOE attended the meeting, which had 300 attendees.

Renewable Energy

- **Solar strategy.** In preparation for FY 2014, the DC SEU designed its low-income renewable energy strategy and developed proposals for continuing solar initiatives. One of the proposed initiatives is an expanded offering for photovoltaic systems for income-qualified single-family homeowners. This initiative was available in Wards 7 and 8 in FY 2012 and early FY 2013. If this initiative is funded by the DC SEU in FY 2014, these services will become available for income-qualified homeowners in all Wards.
- **Solar thermal.** Income verification for 16 low-income multifamily buildings was completed in May. Following a seven-week permitting process, construction began in July to install natural gas-saving solar thermal systems on these buildings located in Wards 1, 4, 5, and 8.
- **Solar conference.** The DC SEU presented a paper and facilitated a panel discussion on the District's leadership in renewable energy installations at the Solar 2013



Source: IECC website; <http://shop.iccsafe.org/2012-international-energy-conservation-code-soft-cover.html>.

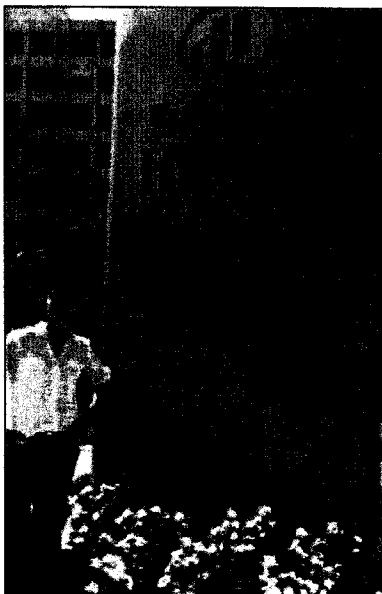
meeting in Baltimore, April 16-20. The conference had approximately 975 attendees.

- **Solar Stakeholder meeting.** In support of the Mayor's Sustainable DC Plan, DDOE is developing a District Comprehensive Energy Plan, known as Energy Smart DC. The DC SEU participated in a DDOE Capital Region Solar Industry Stakeholder meeting on May 29 with attendees from the renewable industry to discuss the role of renewable energy in meeting Sustainable DC goals. An additional meeting was held on June 26 to review and streamline the District's solar permitting processes.
- **Council of Governments.** On June 20, the DC SEU made a presentation on the low-income solar initiatives to the Council of Governments' (COG) Energy and Built Environment Committee.

Commercial and Institutional

- **Universities.** Following introductory meetings in May with Catholic University, the DC SEU now has lighting projects in three buildings with lecture halls and office space. The DC SEU technical services team is preparing a 3-year historical trend analysis of energy consumption, costs, and heating and cooling days for Gallaudet University, to help the university become more aware of its energy spending and identify opportunities for improvements.
- **Technical Assurance Services.** Through its Technical Assurance Services, the DC SEU helps customers make smart, cost-effective energy decisions. Union Kitchen (see **Quarterly Feature**) had planned to purchase several appliances that appeared to be ENERGY STAR-qualified, but were mislabeled. The DC SEU helped Union Kitchen find real ENERGY STAR products that are eligible for Business Energy Rebates. Paramount Group recently received a vendor's payback analysis that the DC SEU recognized as incorrect. DC SEU Energy Consultants worked with the vendor to correct these inputs in their modeling methods to ensure accurate savings projections.
- **Children's National Medical Center.** On May 30, the Children's National Medical Center (CNMC) signed an Incentive Agreement for project work with energy savings of 191 kWh and 112,971 ccf of natural gas; these savings are expected to reduce annual energy costs for the hospital by \$221,000. Project work will begin this summer and will be completed before the end of the fiscal year.
- **Embassies.** On May 1, the DC SEU participated in the DDOE Greening Embassies event to share information about efficiency action items with embassy representatives and to discuss a green embassies pledge with DDOE and the U.S. Department of State. The DC SEU made a presentation, "Your Guide to Green," at

the June 17 Greening Embassies Forum, hosted by the French Embassy. The DC SEU completed a T12 lighting replacement project with the French Embassy earlier in FY 2013.



- **Hotels.** The hospitality market has complex ownership structures; facilities of varying sizes; and a diverse network of service providers, facilities and engineering staff, and shareholders—all of whom are involved in day-to-day operations. Hotels are energy intensive, with 24-hour operations, commercial kitchens, swimming pools, gyms, and, in some cases, laundry facilities. To stay informed about how to meet the needs of hospitality customers, the DC SEU Account Managers participate in industry events. The DC SEU participated in Hotel Association of Washington (HAWDC) events on May 2 and 16, and published an article in the association's monthly newsletter on May 7. Using

HAWDC as a platform for targeted communication, DC SEU Account Managers began to map the DC hotel market and to organize the different players in the DC hospitality market.

- **Gas savings.** The DC SEU continued to pursue gas savings projects as well as new gas savings opportunities. On May 6, 7, and 30, the DC SEU met with three vendors of large boilers to discuss partnership opportunities. All vendor teams were receptive to collaboration and the DC SEU is following up with each vendor.
- **Business Energy Rebates.** In the third quarter, the Business Energy Rebate form was downloaded from the DC SEU website 52 times. To date, 35 Business Energy Rebate applications have been processed for more than \$22,800 in incentives. There are 68 active pipeline projects scheduled for completion by the end of the fourth quarter, worth a possible \$128,000 in rebates.
- **T12 Replacement initiative.** The FY 2013 T12 Replacement initiative promotes the installation of energy-efficient T8 lighting. The DC SEU provides an incentive of 70% of the total lighting replacement cost,



High-performance T8 lighting improved visibility and reduced electric bills for Corner Market, located in Ward 8

significantly reducing the payback period on lighting replacement for customers. DC SEU staff held T12 Telethons in April and May, and called more than 200 small businesses to generate leads for T12 projects. The DC SEU gave participating contractors these leads and DC SEU-branded marketing materials, to help them promote the T12 Replacement initiative and explain the benefits of energy-efficient lighting to customers. Fifteen contractors and suppliers from eleven Certified Business Enterprises (CBEs) participated in training in initiative protocols and in a networking luncheon hosted by the DC SEU. These contractors signed agreements with customers and began work in April.

- **Energy Efficiency Forum.** On June 13, the DC SEU attended the 24th Annual Energy Efficiency Forum. The forum highlighted efficiency's role as a cost-effective resource to meet increasing energy demand; a strategy to make communities more secure, resilient, and sustainable; and as a driver for innovative new technologies and practices.
- **Closing out the year.** In preparation for the last quarter of the fiscal year, the C&I team is prioritizing its project pipeline to complete projects by the end of the fiscal year. In June, the DC SEU closed 10 projects, the second-highest number of completed projects per month for the year after February.
- **Challenges and opportunities.** *Some C&I customers continue to request set incentive values before a project analysis is completed. The custom analysis ensures that incentive dollars are going to cost-effective, high-value projects. The custom analysis is viewed by a few customers as a barrier to working with the DC SEU. The DC SEU continues to work with them to demonstrate that the DC SEU analysis provides value to the marketplace, beyond the allocated incentive dollar amount.*

6. Activity Supporting DC SEU Programming

Advanced Technical Analysis Support

- **Technical analysis tools.** The DC SEU Lighting Power Density (LDP) tool and Comprehensive Analysis Tool (CAT) were updated in the third quarter. The LDP tool was revised for IECC 2012 code changes and to correct electric heat treatment. In addition, the lighting table was updated and a fixture schedule, grid count, and method for exterior lighting were added. The CAT was updated for project review thresholds, different funding sources (electric versus gas), and for standardizing and clarifying financial payback as well as internal rate of return.
- **EM&V.** Following the completion of the FY 2012 DC SEU Evaluation, Measurement, and Verification (EM&V) report, the DC SEU applied the savings realization rates to

all savings calculation methods. Tetra Tech, the verification consulting firm acting on behalf of DDOE, has categorized all measures; and their confirmed energy savings rates were replicated and applied in the database for FY 2013 work.

- **Energy savings through water conservation.** The Technical Analysis team proposed a method to Tetra Tech to account for energy savings for projects with DC Water. In May, the EM&V team provided Tetra Tech and DDOE with additional data, per their request, as the data relate to energy use per gallon of water pumped at the source. The report is currently under review, and discussions will continue in the fourth quarter.
- **Six-month update.** The Technical Analysis team provided DDOE and Tetra Tech with preliminary cost-effectiveness results and a snapshot of energy savings and installed measures in the first six months of FY 2013. The savings achieved to date have been cost-effective when compared to other state efficiency programs. The results are categorized by initiative to inform Tetra Tech's evaluation planning and monitoring activities for the remainder of the fiscal year.
- **Technical measure characterizations.** The Technical Analysis group completed and revised technical measure characterizations to determine energy savings for the following measures:
 - Residential
 - ENERGY STAR storage water heaters
 - Tankless water heaters
 - Hot water boilers
 - Combined high-efficiency boiler and water heating units
 - Gas furnaces
 - Boiler controls
 - Programmable thermostats
 - Wi-fi-connected thermostats
 - Hot water re-circulator pumps
 - Heat recovery ventilators
 - Energy-efficient refrigerators
 - Room air conditioning units
 - Commercial and Institutional
 - Water source heat pumps

- Variable frequency drives
- Unitary and split HVAC systems

Finance and Leveraging

- **Commercial lending.** The DC SEU developed a partnership with Pollin Energy and Retrofits (PEAR, also known as Pear Energy) to provide unsecured commercial lending for projects over \$50,000, with interest rates ranging from 6% to 9%. Financing is now available for qualifying C&I projects.
- **National Housing Trust.** In the third quarter, the DC SEU collaborated with National Housing Trust (NHT) to develop a low-income financing program for the multifamily housing market. Working with NHT, the DC SEU is developing a plan for low-income multifamily financing and a low-income solar initiative that will complement the existing DC SEU renewable energy offerings. The initial proposal is scheduled to be completed in July.
- **Challenges and opportunities.** *The DC SEU continued outreach to recruit an additional member bank in the Federal Home Loan Bank system to support FY 2013 Home Performance with ENERGY STAR projects with low-income single-family homeowners. Establishing a partnership with a second member bank has been a challenge. A second bank partner would allow the DC SEU to undertake comprehensive energy efficiency retrofits for up to 80 more income-qualified homeowners; the value of these projects is approximately \$1 million.*

Public Affairs

- **Public television exposure.**

Managing Director Ted Trabue was filmed for a segment in the public-access television show, *Ingrid's World*, on April 15. The segment aired on June 2 as part of the Home Show episode. *Ingrid's World* is an inspirational television program that connects viewers with services in their communities. Mr. Trabue's interview tells viewers



about opportunities to save energy and money through DC SEU initiatives. *Ingrid's World* has on-air exposure to 657,000 viewers including residents in Northern Virginia, Maryland, and the District of Columbia.

The DC SEU filmed its first DC cable television public service announcement on June 10, detailing five ways to save energy at home. On August 4, the DC SEU will film a segment with Emerald Planet Television to air on Channel 10 and C-SPAN; it will be simulcast on 532 stations around the country.

- **Councilmember meetings.** As part of its commitment to keep City Councilmembers apprised of DC SEU activities, the DC SEU met with Councilmember David Grosso on May 20. In this meeting, DC SEU staff introduced DC SEU initiatives and solicited suggestions as to how the DC SEU can better serve District residents and businesses.
- **Earth Day event.** In coordination with DDOE and the Public Service Commission, the DC SEU participated in an Earth Day Event on April 17 in the East Hall of Union Station. The event featured speakers from the District Government and a vendor fair for residents and businesses. The DC SEU staffed an exhibit, sharing information about energy-saving initiatives for residents and businesses.

Public Relations

- **Women's Council on Energy and the Environment.** The Women's Council on Energy and the Environment (WCEE) provides nonpartisan, policy-neutral forums on energy and environmental issues and fosters the professional development of its members. To reach WCEE's large national and District-based membership, the DC SEU wrote an article for the organization's monthly online newsletter. The DC SEU article will be featured in the July issue of their newsletter, the *Current*.
- **NEEP Business Leaders awards.** After nominating American University for the NEEP Business Leaders Award in February, the DC SEU delivered a press release, coordinated a video shoot at American University, and attended the awards ceremony in the third quarter. The video described the DC SEU's partnership with American University, the university's campus-wide energy efficiency efforts, and the Bender Arena lighting upgrade project. The video was shown at the June 18 awards ceremony in Springfield, Massachusetts to more than 100 attendees. A press release to share the video with local and national media will be made public in July. See <http://neep.org/neep-supporters/business-leadership/case-studies/american-university>.
- **Online coverage.** In the third quarter, the DC SEU was featured in articles on a neighborhood blog, Borderstan. Borderstan shared information on DC SEU rebates for lighting, refrigerators, and dishwashers. It also provided a link to the DC SEU website in "Spring Cleaning for Your Energy Bills."

Community Outreach

- **EnergySmart DC.** On April 30 and June 1, the DC SEU spoke at the DDOE Comprehensive Energy Plan and Residential Input EnergySmart DC sessions. Industry professionals, organizations, residents, and local advocates attended the events.
- **Earth Day events.** The DC SEU staffed an exhibit at Earth Day events at Howard University on April 22 and at the Children's National Medical Center (CNMC) on April 25.
- **Bloomingdale Community Day.** The DC SEU promoted the Efficient Products initiative and shared information about the DC SEU at Bloomingdale Community Day on May 18 for an estimated 80 attendees, mostly from Ward 5. As part of its outreach efforts, the DC SEU is working with the Ward 5 Planning Coordinator and is a member of the Office of Planning's inter-agency committee. The Office of Planning has agreed to distribute DC SEU marketing materials at its office and at events.
- **Dumbarton Oaks.** The DC SEU shared information about the DC SEU's goals, values, and residential initiatives to help save energy and money with approximately 50 attendees at the Dumbarton Oaks Open House on May 4.
- **DHCD Housing Expo.** On June 1, the DC SEU participated in the 5th Annual DC Housing Expo as an exhibitor, sharing information about residential initiatives. The Expo had 500 attendees and provided resources for renters and homeowners.
- **Friends of Rhode Island Avenue.** The DC SEU made a presentation to Friends of Rhode Island Ave (FoRIA) on June 25, promoting the Business Energy Rebate initiative to local businesses.
- **Community engagement planning.** In the third quarter, the DC SEU prepared for community outreach activities through the end of the fiscal year. In coordination with Public Affairs, the Community Engagement team reached out to Councilmember offices to identify upcoming community events and active organizations within each Ward.



At the DHCD Housing Expo, the DC SEU demonstrated the energy efficiency of CFLs and LEDs compared to incandescent bulbs using a Watt meter

- **DC Federation of Civic Associations.** Managing Director Ted Trabue made a presentation to the Civic Association Presidents on May 22 to share information about the DC SEU's goals, operations, structure, and services.

Marketing

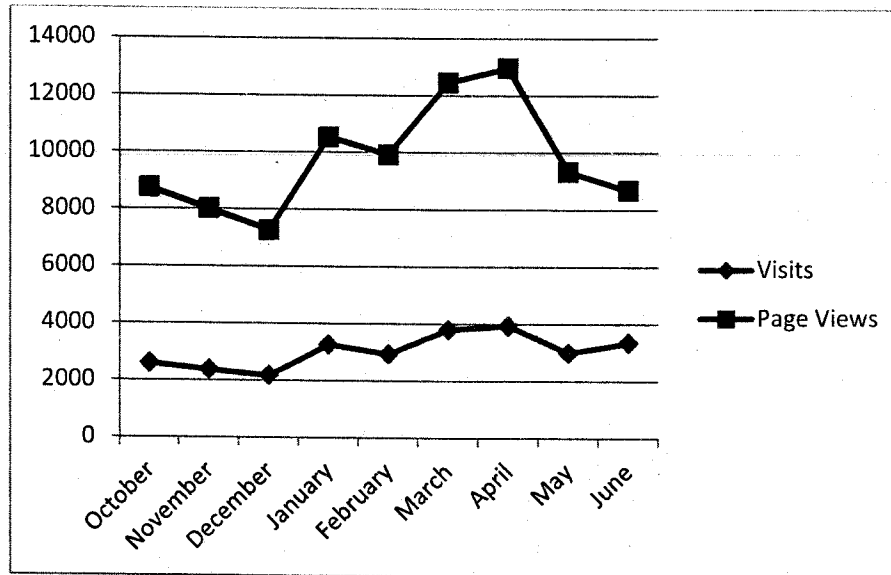
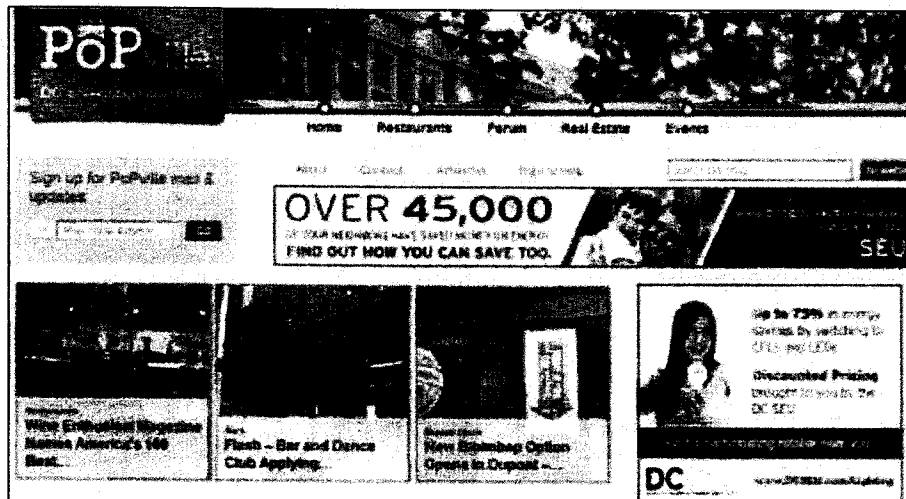


Figure 1. DC SEU website visits and page views, FY 2013

- Website visits **3,346**
- Facebook **175 Likes**
- Twitter **470 Followers**

- **Social media.** A joint effort between the Marketing and Public Relations team to better utilize DC SEU social media has led to an increase in Twitter followers (from 400 to 470) and Facebook "Likes" (from 148 to 175) in the third quarter. The DC SEU offers tips to save energy, links to press releases, information on emerging technology, and industry news through its social media channels.
- **Brand development.** The DC SEU is working with a DC graphic designer to develop a new DC SEU logo and brand, as well as style guidelines. These will be finalized in early July and the new brand will be aligned with all DC SEU communications and outreach in preparation for the new brand and website re-launch in the first quarter of FY 2014.
- **Mobile traffic.** The DC SEU website continues to experience strong mobile traffic, with nearly 2,000 visits from mobile / tablet sources in June. This trend will factor heavily into the design and execution of the redevelopment of the site.

- **Strategic planning.** The Marketing team completed a strategic marketing plan and began implementation of a strategy to help the DC SEU and its initiatives meet end-of-year goals in the final five months of FY 2013.
- **Supporting initiatives.** In the third quarter, the Marketing team finalized a new Home Performance with ENERGY STAR brochure and delivered a direct mail postcard that reached 2,000 potential customers. In support of the Efficient Products Food Bank initiative, the DC SEU prepared handouts and canvas bags for customers and developed posters that were hung at Bread for the City. In preparation for the gas efficient products promotion (see **Residential**), the Marketing and Efficient Products team developed a brochure and web content for water heater, boiler, and furnace rebates.
- **Newsletters.** A Retail Partner newsletter was released in May and offers participating retailers best practices to save energy and updates on efficient products. The first monthly DC SEU newsletter will be sent to residential and business customers in July. This newsletter will contain information on initiatives, tips on how to save energy for residential and business customers, and timely announcements.



- **Advertising.** The Marketing team implemented an advertising campaign to promote residential initiatives in the remaining months of the fiscal year. Ads began appearing in June and will continue through August and September in the *Washington Informer*, *Capital Community News*, *The Current Newspapers*, and online with Prince of Petworth (www.popville.com).

Market Transformation

- **Benchmarking Help Center.** The Benchmarking Help Center assisted the Department of General Services (DGS) by updating energy and water consumption for its portfolio of buildings in the EPA's Portfolio Manager tool. With support from the Help Center, DGS entered its 240 public buildings in the EPA Better Buildings Challenge in May. The DDOE began mailing notices to non-compliant building owners. In response, there is an increased demand for Benchmarking Help Center assistance and trainings.
- **Green leasing.** More than 500 real estate brokers from 30 companies received green leasing training from the DC SEU from November through the end of May. Participants received one of their three required hours of Continuing Education credit through this course, which covered green leasing and benchmarking in the District.
- **DCRA Green Symposium.** In preparation for the DCRA Green Symposium on September 24, the DC SEU participated in calls on May 15 and 29 to assist with event planning and scheduling the keynote speaker, Jonathan Rose. Mr. Rose owns a green development company that participates extensively in the Enterprise Green Communities certification.

Compliance

- **Compliance training.** The workforce compliance group continued to train contractors and subcontractors through webinars and one-on-one, in-person training sessions in the third quarter. The workforce compliance group conducted an Executive Compliance Training for DDOE on May 13 and an Introductory Compliance Training for new DC SEU staff on June 6.
- **Audit.** In April, the workforce compliance group hosted the third-party auditor (FS Taylor) in their offices as they performed their audit of the contracting and employment data from Fiscal Year 2012.
- **On the horizon.** *The workforce compliance group will send the first submission of the Contractor Report Card in July. The Contractor Report Card is a rating system that ranks contractor reporting histories and will be submitted monthly to DC SEU.*

Workforce Development

- **Internships.** Eight temporary workers have been hired and began working at the DC SEU in June (see **Message from the Managing Director**). These positions are: Business Process Analyst intern, Marketing and Events intern, Business Energy Solutions intern, Public Affairs intern, C&I intern, IT intern, Communications and

Marketing intern, and Energy Associate intern. The interns are District residents and are current students or graduates of the University of the District of Columbia, George Washington University, the College of Wooster, American University, Yale University, and the University of Virginia.

Table 6. Third quarter green jobs by Ward

Job Title	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Total
Energy Associate intern	1		1	1		2			5
Marketing intern				2		1	1		4
Energy Associate intern	3	2		3					8
Marketing intern	2	3	1		1	1	1		9
Energy Associate intern	6	1	3	2	4	6	1		23
Marketing intern	1			1				1	3
Energy Associate intern	2								2
Marketing intern	1		3	2	1	1			8
Cumulative total positions, by Ward	16	6	8	11	6	11	3	1	62

Table 7. DC SEU initiatives, by sector

Sector	Initiative Name	Description	Customer	Status
Residential	Efficient Products	Deep discounts on CFLs with partnering retailers in DC; mail-in rebates for qualifying energy-efficient appliances	DC residents	On track
	Efficient Products at Food Banks	CFLs offered at no charge for patrons of food banks	DC residents meeting income requirements	On track
	Home Performance with ENERGY STAR	Rebates for energy efficiency improvements: air and duct sealing, insulation, and heating system improvements	DC single-family homeowners	On track
	Federal Home Loan for Home Performance with ENERGY STAR	100% forgivable loans for household improvements made through the Home Performance with ENERGY STAR program	DC single-family homeowners meeting income requirements	On track

Sector	Initiative Name	Description	Customer	Status
Low-Income Multifamily	Low-Income Multifamily Comprehensive	Custom technical and financial assistance for energy efficiency improvements for multifamily properties	Property owners of multifamily buildings serving DC residents meeting income requirements	On track
	Low-Income Implementation Contractor-Direct Installation	Direct installation of CFLs, low-flow faucet aerators and showerheads, hot water tank wrap, and pipe wrap in low-income multifamily properties	Property owners of multifamily buildings serving DC residents meeting income requirements	Inactive
Renewable Energy	Solar Photovoltaic (PV)	Incentives and financing to install solar PV systems	DC single-family homeowners meeting income requirements	Inactive
	Solar Thermal	Incentives to install solar thermal arrays to provide hot water and reduce natural gas consumption	Income-qualified cooperative housing and property owners of multifamily buildings serving DC residents meeting income requirements	On track
Commercial and Institutional	Business Energy Rebates	Rebates for energy-efficient lighting, heating, refrigeration, cooking, and other qualifying equipment	Business owners	On track
	T12 Lighting Replacement	Incentives for customers to re-lamp and re-ballast existing T12 fixtures with high-performance T8 lamps and ballasts	Business owners	On track
	Benchmarking Help Center	Guidance on benchmarking energy and water use in the EPA Portfolio Manager tool to report to the District Department of the Environment	Building owners and property managers	On track
	Commercial and Institutional Custom	Technical assistance, account management, and financial incentives for energy efficiency projects	Large commercial and institutional customers	On Track